

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) An electronic apparatus for use in a parking system, said apparatus comprising:

a housing;

a microcomputer disposed within said housing, said microcomputer further comprising at least one memory for storing parking parameters and credits;

a time monitoring crystal electrically coupled to said microcomputer to generate accurate timekeeping, wherein the microcomputer debits the stored credits based on the stored parking parameters and time;

a display means for displaying human readable information including a plurality of segments electrically coupled to and controlled by said microcomputer, said display means externally located on a face of said housing, wherein ~~said display means includes a controllable~~ each segment is configured to allow light to pass through said display means when ~~the controllable~~ each segment is off and blocks light from passing through said display means when ~~the controllable~~ each segment is on;

a corner cube disposed behind ~~the controllable~~ a single segment of the plurality of segments of said display means configured to reflect light back to a source external of the apparatus when the ~~controllable~~ single segment is off, wherein upon light being directed at said display means by the source external to the apparatus, the ~~controllable~~ single segment is turned on and off at a serial data rate by said microcomputer to passively transmit non-human readable status and parking-related data from said apparatus by modulating on and off the light reflected by the corner cube through the single segment;

at least one momentary switch for operating said apparatus; and
a battery to power to said apparatus.

2. (Original) An apparatus as in claim 1, further comprising four momentary switches for entering data and programming said apparatus.

3. (Previously presented) An apparatus as in claim 2, further comprising an infrared serial interface coupled to said microcomputer, said interface includes a light emitting diode and an infrared diode used to send and receive data through said face of said housing.

4. (Previously presented) An apparatus as in claim 3, wherein said microcomputer further comprises an internal read-only memory (ROM) with a capacity of 16K data for storing programs, bit maps and tables.

5. (Original) An apparatus as in claim 4, wherein said microcomputer further comprises an internal random access memory (RAM) with a capacity of 3500 nibbles for storing parking parameters and random codewords.

6. (Original) An apparatus as in claim 5, wherein said microcomputer further comprises an internal clock divider to generate 1/2 Hz and 1/16 Hz clock signals.

7. (Original) An apparatus as in claim 6, wherein said microcomputer further comprises an internal battery checking circuit.

8. (Original) An apparatus as in claim 7, wherein said crystal operates at 32,768 KHz.

9. (Original) An apparatus as in claim 8, wherein said display means is a liquid crystal display (LCD).

10. (Previously presented) An apparatus as in claim 9, wherein said liquid crystal display comprises 1024 pixels organized as an array of 16 rows by 64 columns.

11. (Original) An apparatus as in claim 10, further comprising a temperature sensing circuit, said temperature sensing circuit includes a NTC thermistor, a resistor and a capacitor connected in parallel.

12. (Original) An apparatus as in claim 11, wherein said microcomputer further comprises a LCD electrical interface coupling said microcomputer to said liquid crystal display, said LCD interface controls bias voltages to said liquid crystal display in response to an input to said microcomputer from said temperature sensing circuit.

13. (Original) An apparatus as in claim 1, wherein said apparatus is disposed in an automobile such that said display means can be viewed from a location external to said automobile.

14. (Original) An apparatus as in claim 1, further comprising a motion detecting means, said motion detecting means terminates active parking upon detecting motion.

15. (Cancelled)

16. (Cancelled)

17. (Currently amended) An electronic parking system, said system comprising:

an in-car parking meter having a first data transferring means and a display for displaying human readable information including a plurality of segments, said meter being disposed in an automobile such that said display can be viewed from a location external to said automobile, said first data transferring means includes a single controllable segment of the ~~display~~ plurality of segments configured to allow light to pass through said display when the single controllable segment is off and blocks light from passing through said display when the single controllable segment is on and a reflector disposed behind the single controllable segment of said display configured to reflect light back to a source external of the apparatus when the single controllable segment is off, wherein upon light being directed at said display, the single controllable segment is turned on and off at a serial data rate to passively transmit non-human readable status and parking-related data

from said ~~apparatus~~in-car parking meter by modulating on and off the light reflected by the reflector through the single controllable segment, and

an external transceiver having a second data transferring means, said second data transferring means configured to communicate with said first transferring means of said in-car parking meter, said second data transferring means including a light point source for directing light at said ~~display~~the single controllable segment and a photodetector for receiving said non-human readable status and parking-related data from said in-car parking meter by detecting the modulated light reflected by the reflector through the single controllable segment.

18. (Previously presented) A system as in claim 17, wherein said in-car parking meter comprises:

a housing;

a microcomputer disposed within said housing;

a time monitoring crystal electrically coupled to said microcomputer to generate accurate timekeeping;

the display electrically coupled to said microcomputer, said display externally located on a face of said housing;

at least one momentary switch for operating said apparatus; and

a battery to power to said apparatus.

19. (Previously presented) A system as in claim 18, wherein said in-car parking meter further comprises four momentary switches for entering data and programming said in-car parking meter.

20. (Previously presented) A system as in claim 18, wherein said in-car parking meter further comprises an infrared serial interface coupled to said microcomputer, said interface includes a light emitting diode and an infrared diode used to send and receive data through said face of said in-car parking meter.

21. (Previously presented) A system as in claim 20, wherein said external transceiver further comprises an infrared light emitting diode and a phototransistor for sending and receiving data from said serial interface of said in-car parking meter.

22. (Original) A system as in claim 21, wherein said transceiver is portable, said transceiver being carried by a parking enforcement official to read data from said in-car parking meter.

23. (Previously presented) A system as in claim 21, wherein said transceiver is formed to receive said in-car parking meter as to block ambient light during communication.

24. (Original) A system as in claim 23, wherein said transceiver is positioned at an entrance to a parking facility.

25. (Original) A system as in claim 24, wherein said transceiver wirelessly transmits data from said parking facility to a remote location.

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Previously presented) A system as in claim 17, wherein said external transceiver is portable, said external transceiver being carried by a parking enforcement official to read data from said in-car parking meter.

30. (Withdrawn) A method of generating codewords to program an electronic apparatus with monetary credits, said method comprising the steps of:

generating a serial number associated with said electronic apparatus;

providing a hardware based crypto-grade random number generator;

generating a first random number table from said crypto-grade random number generator;

generating a second random number table from said crypto-grade random number generator;

indexing said serial number to a first entry in said first random number table and to a second entry in said second random number table ;

summing said first entry and said second entry resulting in a hexadecimal sum; and

converting said hexadecimal sum into a first seven digit binary coded decimal value codeword.

31. (Withdrawn) The method of claim 30, further comprising the step: providing a second seven digit binary coded decimal codeword whereby said second codeword validates said first codeword.

32. (Withdrawn) The method as in claim 31, further comprising the step of providing a storage means for storing a plurality of codewords, said storage means comprises a microprocessor and non-volatile memory.

33. (Withdrawn) The method as in claim 32, further comprising the step of providing a block access code for allowing access to said plurality of codewords.